SOME MODIFICATIONS OF THE HEBREW VOWEL SYSTEM AS FOUND IN THE MASSORETIC TEXT OF THE OLD TESTAMENT

BY

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Some Modifications of the Hebrew Vowel System as found in the Massoretic Text of the Old Testament.

Introduction.

Before proceeding to discuss the various changes in this system it is desirable to present tables and diagrams which will give a birds-eye view of the whole subject.

There are three original vowels in the Semitic languages viz: ă, ĭ, and ŭ.

The ĕ and ŏ vowels are derived from the three original ones.

The Critical Grammar of the Hebrew Language, by Isaac Nordheimer

Vol. I. pages 11 and 12, contains a very interesting account of the development of these vowels from the anatomical standpoint.

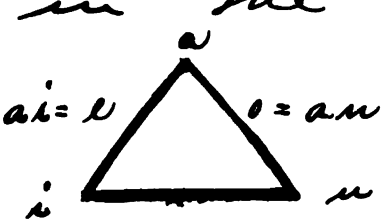
"Of all the sounds which human speech is composed that of the vowel a is the simplest and the most easily produced, it consisting of a mere emission of the voice through the unclosed lips; and on this account in most alphabets it ranks the first.

2). The vowel i is produced by the greatest horizontal dilation of the mouth, or in other words it is that vowel in the enunciation of which the oral aperture is extended longitudinally in the greatest degree.

3). The utterance of its opposite u is effected by the closest approximation of the corners of the mouth during the emission

of the voice. The remaining vowel-sounds are the intermediates of the three principal ones: thus the diphtongal vowel e holds a place between a and i, both of which sounds may be said to enter into its composition, whence it is frequently denoted both in English and French by the two conjoined; so too the diphtongal o, the medium between a and u, is represented in the latter tongue by a combination of its elements, thus au, faux. It may be worthy of mention that in the Gothic Gospels of Ulphilas the Greek vowels ε and ο are respectively represented by ai and au.

The whole five may be appropriately arranged in the following manner:



The vowels on left side of the diagram are those produced by dilating and those on the right by contracting the orifice of the mouth in a horizontal direction.
The vowels placed furthest from a, viz: i and u, are thus modified in the greatest degree; and those placed half-way between the simplest vowel and each of its extremes are less so, being something between the simplest and the most highly modified forms, and partaking of the nature of both."
As to the class of these vowels, the division given by Wm R. Harper, University of Chicago, is perhaps the best.
It is as follows:-

A-Class.

1. = (ă) = Pure Short.

2. $\breve{u}$ = Attenuated.
3. $\hat{a}$ = Contracted.
4. $\hat{o}$ = Obscured.
5. $\bar{a}$ = Tone-long.
6. $\underline{e}$ = Tone-short.
7. e' = Tone-long.
8. $\underline{a}$ = Tone-short.

I-Class.

1. $\breve{u}$ = Pure Short.
2. $\breve{i}$ = Deflected.
3. $\hat{i}$ = Contracted.
4. $\hat{e}$ = Contracted.
5. $\hat{e}$ = Contracted.
6. $\bar{e}$ = Tone-long.
7. $\underline{e}$ = Tone-short.
8. $\underline{a}$ = Tone-short.

U-Class.

1. $\breve{u}$ = Pure Short.
2. $\breve{o}$ = Deflected.
3. $\hat{u}$ = Contracted.
4. $\hat{o}$ = Contracted.
5. $\bar{o}$ = Tone-long.
6. $\underline{u}$ = Tone-short.
7. o = Tone-short.

As to quantity he further shows as follows:-

Naturally Long.

1. ⊤ (â) = Contracted and Characteristic.
2. ⊤̇ (ê) = Contracted etc
3. ⊤̈ (îi) = Contracted etc.
4. ⊤̤ (ê) = Contracted.
5. ⊤̤̇ (ê) = Contracted from a+y.
6. j or j̇ (ô) = Absenation of a naturally long ⊤.
7. j (ô) = Contracted.

Tone-Long.

1. ⊤̄ (ā) = Closed tone for open syllable.
2. ⊤̄̇ (ȧ) = Arising from original short ă.
3. ⊤̄̈ (ē) = Arising from short ĭ or ĕ.
4. ⊤̇̄ (ō) = Arising from short ŭ.

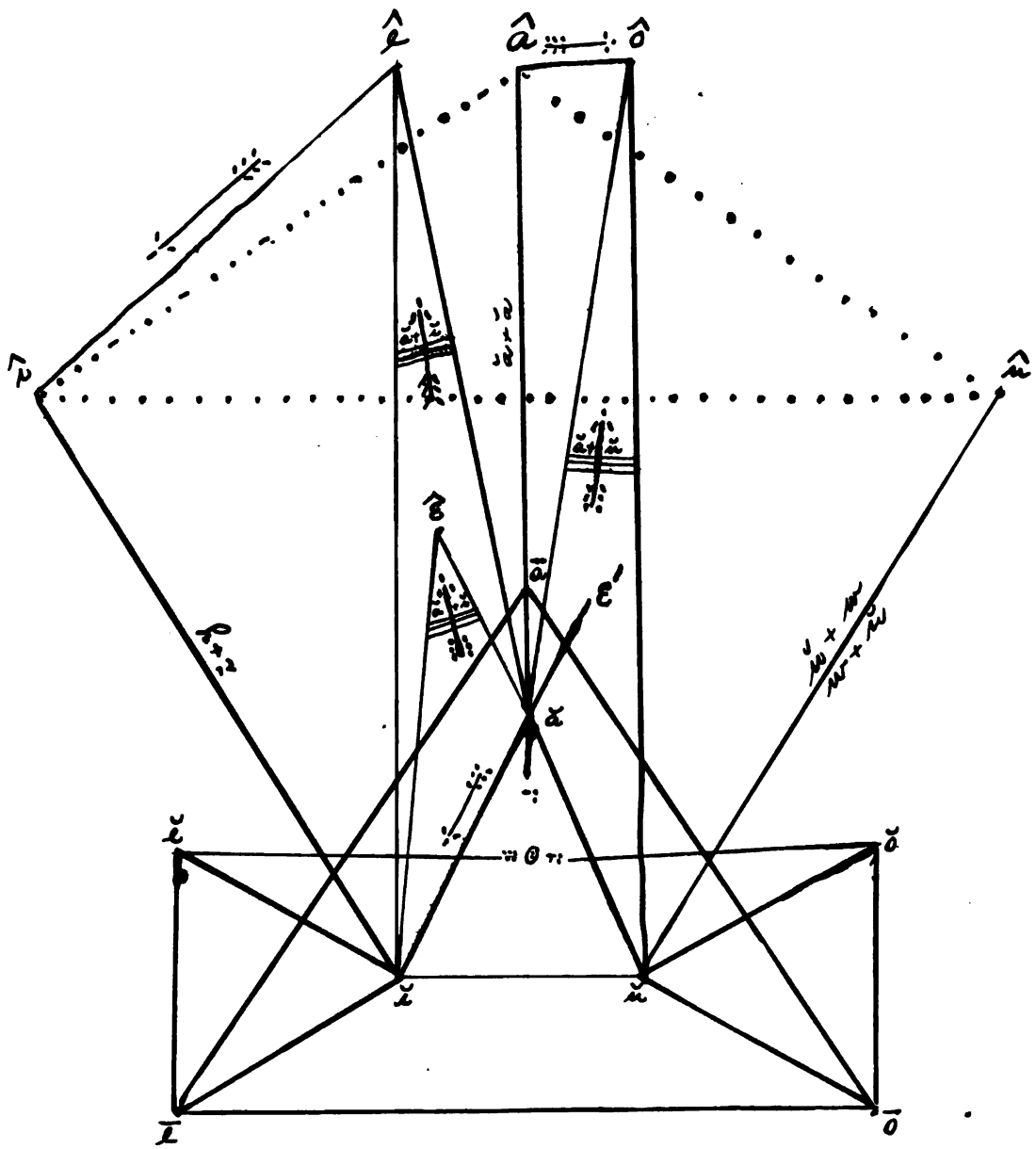
Short Sound.

1. ⊤̆ (ă) = Pure Short.
2. ⊤̇̆ (ŭ) = Pure Short.
3. ⊤̇̆ (ŭ) = Attenuated from ă.
4. ⊤̤̆ (ŭ) = Pure Short.
5. ⊤̈̆ (ĕ) = Deflected from pure ĭ-sound.
6. ⊤̆ (ŏ) = Deflected from pure ŭ-sound.

Tone-Short, or Sẽwâ.

1. = (ă) = Shortened to ÷ or =:.
2. ÷ (ĭ) = Shortened to ÷ or ÷:.
3. ÷: (ŭ) = Shortened to ÷ or T:.

Perhaps the best table yet prepared to illustrate the vowel changes is the following which was obtained from Professor Ira M. Price, University of Chicago:—



The following vowel-changes will be considered :-
1. Contraction, 2. Heightening, 3. Obscuration, 4. Deflection, 5. Attenuation, 6. Thinning, 7. Shortening, 8. Blunting, 9. Volatilization, 10. Sharpening, 11. Weakening, 12. Formation of new vowels, 13. Modification, 14. Anomalous Lengthening, 15. Prosthetic Vowels, 16. Päthäkshuttive, 17. Auxiliary Vowels, 18. Connecting Vowels, 19. Original Short.

I. Contraction.

Contraction is the process whereby two vowels, or a consonant and a vowel, are united together into one vowel.

This combination gives a naturally long vowel which is unchangeable at least as far as the process of volatilization is concerned, yet there are some exceptions to this general statement. Perhaps ⁷ד֣ from ⁷דִי is the best example,

yet Gesenius says that the plural
בְּתוּלִים is probably from a different
singular.
The following are the various
contractions found:—
1. â (ָ) = ă + ă e.g. וַיִּבֶן מִן
from וַיִּבֶן עִם Nehemiah 3:13.
Examples of this contraction
are rare and subject to discussion.
2. î (יִ) = ĭ + y e.g. וַיִּרְדְּפוּ from וַיִּרְדְּפוּ.
= y + ĭ e.g. לַיְהוָה from
לַיְהוָה = לַיְהוָה where the י
is commuted into י and
then contraction takes place.
3. û (וּ) = w + ŭ e.g. וַיְהִי from וַיְהִי
= ŭ + w e.g. וַיְהִי from
וַיְהִי.
In a few cases the original —
is retained and Dāghēsh-forte
inserted in the second radical
as in לַמַּה if the Yodh is not

assimilated here.

4. ê (ֵ) = a+y e.g. בֵּית from בַּיִת.

5. ê (ֵ) = a+y e.g. מֵיטִיב from מַיְטִיב.
= a+i e.g. בֵּן from בַּיִן.

There is doubt as to the above example illustrating the contraction of a+i into ê (ֵ), but it seems to point that way. Gesenius says "עַיִן (ground form ʿayn [ʿain] eye, construct עֵין)" William Henry Green gives the following:- "Middle Yodh quiesces in the plural of שֶׂה ram plural כְּבָשִׂים, זַיִת olive plural זֵיתִים, לַיִל night plural לֵילוֹת, but not in חַיִל strength plural חֲיָלִים, עַיִן fountain plural עֲיָנוֹת, יָעֵל ass-colt plural יְעָלִים, שְׂעִיר goat plural שְׂעִירִים.

Middle Yodh always quiesces before the feminine and dual endings e.g. ל׳ך provision feminine ל׳ך׳ך, ע׳י eye dual ע׳י׳י" Again he says ש׳ר׳ after the softening of ך to ר becomes ש׳ר׳ר׳.
Not only is the Yodh quiescent here, but there are examples to show that ש and ל also quiesce.
It seems that the form ע׳ל׳ is a defective writing for ע׳ל׳ך׳ from ע׳ל׳ך׳. The ־(ă) + ע are contracted into ê and the Yodh becomes quiescent. This being true there seems to be no reason why the Yodh in ש׳ר׳ר׳ may not be quiescent and the ־ + ֲ unite to form ֱ fully written, yet one recognizes the fact that the ֲ is a helping vowel.
If it can be proven that a

helping vowel can be united with another the point in the argument is gained.
It is desirable to prove this because there is an exception in the words mentioned above that must be explained in some such way.
The ע is quiescent and lost in וַיַּעֲשׂוּ from וַיַּעֲשׂוּ of עֲשׂוֹת II. Chron. 22:5 with עָשׂוֹת in II. Kings, 8: 28, 29.
ה is lost in such contractions as a+u = ô in הָלַךְ as found in יֹלַךְ from יְהֹלַךְ.

6. ô(i) = a+w e.g. יֹלַךְ from יְהֹלַךְ by the loss of ה.
= a+w e.g. יִשׁוּ from יִשְׁעוּ and יֹשִׁיעַ from יְהֹשִׁיעַ.

II. Obscuration.

Obscuration is the process by which an a-sound is made indistinct.

The Hebrew has, besides the naturally long ô which comes by the contraction given above, a naturally long ô which comes by obscuration.

It is usually written fully when it has the tone, but defectively when toneless.

In קוֹל it has the tone, but in קוֹלִי it is toneless.

ô (ֹ) = ֹ (â) obscured in לָכֹנִי from לָכֹן where the ô has arisen from the obscuring of â which in turn has come from ַ + ַ = ָ.

Gesenius says, "in the vulgar Arabic as now spoken in south Palestine, yâ kul (he eats) becomes yô kul.

The Hebrew has the a-sound obscured where the Arabic has retained it.
The following examples will illustrate this;- שׁוֹק leg Arabic سَاق, גִּבּוֹר hero جَبَّار, שִׁכּוֹר drunkard سَكْرَان, קֶשֶׁת the arrow-snake قَوْس.

III. Blunting.

The next step to be considered is called blunting, or obtusion, whereby an original ת (תּ) is changed into a ד (תּ).

Eight examples are now presented to illustrate this by a comparison of the Hebrew with the Arabic.

1. □ תּ = تّ.
2. ל תּ (ל תּ) = تّ.

The only instance where ל תּ is found Ezekiel 34:31.

It would seem that the תּ is only an incorrect writing of תּ, in which case one of the points of תּ was omitted by the scribes.

In favor of this is the fact that some MSS read with תּ (ל תּ). The MSS waver between ל תּ and ל תּ.

3. □ תּ = تّ in قَتَلْتُمْ.
4. ל תּ = تّ in قَتَلْتُنَّ.
5. □ תּ = ثّ.

6. ʃ ː = كُنَّ
7. □ ː ː (– □ ː) = نُكِّرَ .
8. ɾ ː ː (– ɾ ː) = نُفِّنَ .

IV. Deflection.

This step is known as deflection. There are only two vowels thus affected.

An ĭ (ִ) is deflected to ֱ (ĕ) and an ŭ (ֻ) to ŏ (ֹ).

A short ă (ַ) is often deflected in unaccented shut or closed syllables into ĕ (ֱ).

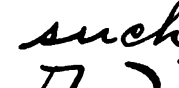
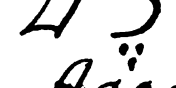
In the word יָדַיִם with the pronominal suffix the form יָדֶיהָ is found where one would expect the form יָדַיהָ.

In the Syriac the ĕ usually appears as ĭ (ܺ).

The Syriac form for יָדַיִם is ܝܕ̈ܝ̈ܢ.

A short ŭ (ֻ) in an unaccented shut or half-shut syllable according to Wright, generally becomes ŏ (ֹ). An example is found in יְהוֹשָׁפָט from יְהוֻשָׁפָט.

The Arabic is يَهُوشَافَاط.

An exception to this is found in such words as  and  .
According to Dr Harper when an ĭ or ŭ would stand before a guttural, in a closed or half-open syllable, then deflection takes place e.g. for , for , and for .
From the examples given by Wright it seems hardly necessary to use the word "guttural" as given by Dr. Harper.
is one of the examples used by Wright.

V. Attenuation.

The next process is called attenuation.

This is a weakening in intensity whereby an ă (=) is changed into an i (-). This change takes place in three different conditions of the syllable.

1. In half-open syllable, or perhaps better, half-open before the tone e.g. ܟ݂ܘ̈ܪ̈ܝ̈ your blood for ܟ݂ܘ̈ܪ̈ܝ̈.

2. In closed, especially preformative, syllables e.g. ܝ̈ܬ̈ܒ̈ from an original ܝ̈ܬ̈ܒ̈.

3. In a sharpened syllable e.g. ܝ̈ܕ̈ܒ̈ from an original ܝ̈ܕ̈ܒ̈.

This process is likewise exemplified in the Arabic of ܐ̈ܐ̈ with ـِـَـ, ܐ̈ܝ̈ with ـِـْـ

In most of these cases the Syriac ranges on the side of the Arabic, but in some cases it is the Arabic which shows the

weakening of the vowel of the Hebrew צַדִּיק with the Arabic صَدِيق (ṣid-dīḳ) and the Syriac ܙܕܺܝܩ (shat-tīḳ).

Likewise one may compare the Hebrew דָּבָר with the Syriac ܕܰܒܪܳܐ and the Arabic دَبِير.

Something similar to attenuation is found in Latin where an ă is changed into ĭ as lăngo, attingo; laxus, prolixus; ad-ago, adigo; expars, expers; facilis, difficilis.

VI Thinning.

The process called thinning will now be considered.

In the ל"ה verbs before consonant additions the consonant ה, which is represented by ה, combines with the stem-vowel ă and forms הַ.. but before consonant additions to denote gender and number the הַ.. is changed into הַ.

This is found in the Păl, Pi'el, and Hiph'il forms especially. The form שָׁלַחְתָּ becomes שָׁלַחַתְּ; שָׁלַחְתֶּם becomes שָׁלַחֶם and שָׁלַחְתֶּן becomes שָׁלַחֶן.

VII. Heightening.

The step which is now considered is known by various names as:- "heightening", "lengthening", "elevation", and "assimilation".

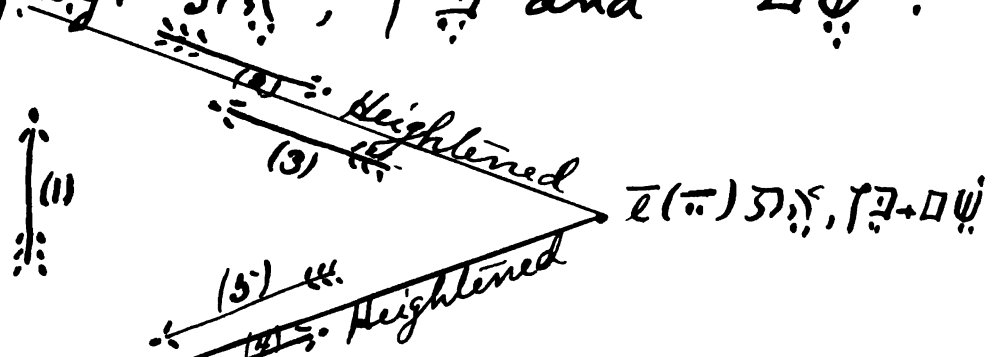
"Heightening" is the term here employed.

There are four tone-long, or heightened, vowels, which have come from seven different operations through the three original short vowels:-

ă (=) → ā (=) יָ = יָ = יָ.
ă (=) → ā (ֿ) בָּ = בָּ = בָּ.
ă (=) → ō (ֹ) בָּקָר of Isa. 60:9 בָּקָר; Isa. 22:1 בָּקְעֵי; בָּקָר, בָּקָר and בָּקָר; which seem to show that ֹ has come from an a-source.

In such words as יָ, בָּ and בָּ an original ַ has been heightened to ָ

In the table, or diagram, below the various steps applicable to these words are shown.
In (1) the ֵ is deflected to ֶ and in (2) the ֶ has in turn been heightened to ַ while in (3) this ַ is again shortened to ֶ when the Mäggēph is added. The original ֵ is shown when a pronominal suffix is added and in (4) this ֵ is heightened to ַ while it in return is again shortened to ֵ when the pronominal suffix is attached, ל(ֵ). e.g. בְּנֵי, לֵב and בִּלְבָּבִי.

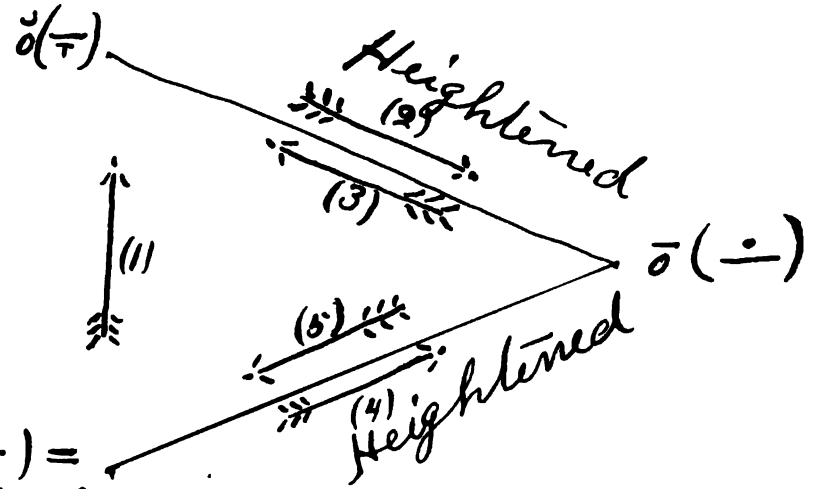


i(ִ)= e.g. לִבִּי, לִב of Proverbs 30:1, and בִּלְבָבִי.
Some might raise an objection,

because of the forms ◻ִ (- ◻ִ) and ֶ֫ (- ֶ֫) and say that these two vowels ֶ and ֵ are both blunted from an original ĭ and if so they come from the same source directly, but in reply would say that the shortened forms with Mäggēph, - ◻ִ and - ֶ֫, are the ones, most probably, which came from the original ĭ.

Of the eight forms which are given under the process of blunting only three appear with the ֵ.

It has been shown also that the form ֶֽ֫ is found only once and that one case is subject to discussion, while in reference to the forms ◻ִ and ֶ֫ it seems that they have been blunted from ֵ.



In this case the ֵ is deflected to ŏ(ֶ) and then the same process is used as in the above diagram of ֶ heightened to ֵ.

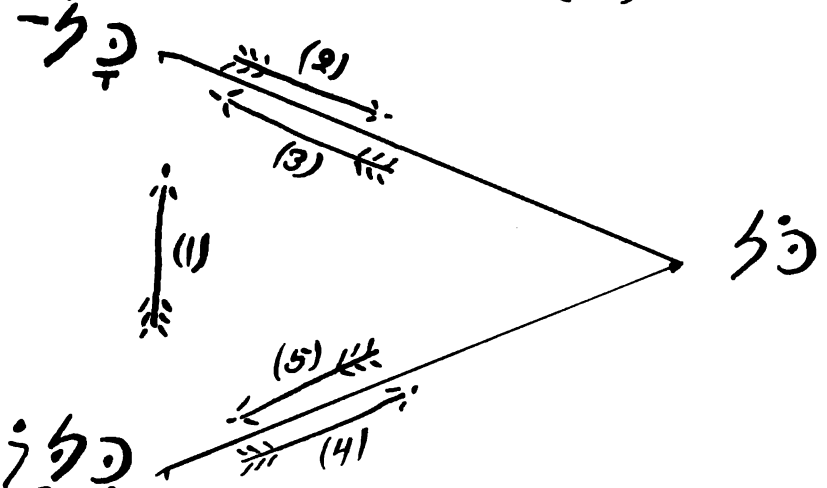
Plain cases of the heightening of ֶ to ִ are to be seen in לֵךְ = לֵכְי in the Pu'al of ע' guttural verbs and in the ŭ-class segholates e.g. רֵעַ = רֵעְי.

A further illustration of the above figure may be seen in the use of the word לֵב.

The original ŭ(ֶ) of this word is to be seen when a suffix is added i.e. לִבִּי.

In the Arabic the form is قَلْب

(kullu) where even the reason for the Dageš-forte is shown in the doubler (w).



This original ŭ (֫) is heightened to ֨ (ă) in ׳ב.
This ֨ is shortened when the pronominal suffix is added.
Again, the ֫ is deflected into ŏ (֪), as shown above, when the Mäggēph is attached.
This ŏ (֪) is heightened when the Mäggēph is withdrawn, and the heightened form ׳ב is shortened when the Mäggēph is again added.
So too the original ◻ּ֪ with

the ·ל consecutive out of pause gives ם פַּתַּח ל, while in pause it is ם פָּתָח ל where the ŏ (ַ) has been heightened to ō (ָ).
Thus the figure is true of ם ל פ as in לם.
Wright says "so also long ū may in certain instances be shortened into ŭ, ŏ and then this vowel be reheightened into ó: ם ל וּ = يَتْرُبُ, but ם יְ ל and ם יִ ל = يَتْرُبْ.

VIII. Sharpening.

A sharpened syllable is one whose final consonant is doubled by means of a Dageš Forte.

In this process there are two vowels which are materially changed. These are ĕ (ֶ) and ŏ (ָ).

The ֶ is thrown back to its original ă (ַ) whence it had been deflected e.g. בַּ֫עַד with becomes מִבַּ֫עַד with a pronominal suffix cf. Isa. 10:18 כִּבְּדֹ֣ן from כְּבֹ֣ד.

Also compare עַ֫מִּי with עֲמִ֫יתָ.

The ŏ (ָ) is sharpened into ŭ (ֻ) in some cases, but not always e.g. פֹּה with the Mäggēph becomes פֹּ֫ה and when sharpened the original ŭ (ֻ) is restored as in פֻּ֫ה but not always for the form פֹּ֫ה

is found and in Ezekiel 20:18 even the form תַּאֲכֵלוּ is seen. Again יֹאכַל = יֹאכֵל = תֹּאכַל, but in Ex. 15:2 it is תְּהִלָּתְךָ and in Ex. 15:13 it is תְּהִלָּתֶךָ, while in Ps. 81:2 the form תְּרִיעוּ is found. In the Hôph'ăl forms of the פ"י verb, the original ŭ (חֳ), which in most cases is deflected to ŏ (חָ), is restored e.g. הָחְזִיק for הָחְזִיק and הָחְזִיקוּ for הָחְזִיקוּ.

IX. Shortening.

The process of shortening is as follows:-

1. ā (◌̄) becomes ă (◌̆) e.g. בָּרָא (construct, which is a shortened form, בָּרָ֫א) and בָּרָ֑אשִׁית (construct בָּרֵ֑אשִׁית).

2. é (◌́) becomes ă (◌̆) in וַיֹּאמֶר, when the suffix is added as in וַיֹּאמְרוּ, for here the tone passes away from the é (◌́) and it goes back to its original.

3. ē (◌̄) becomes ĕ (◌̆) e.g. הֵם (construct הֵ֫מָּה, with suffix הֵ֫מָּה).

4. ē (◌̄) becomes ĕ (◌̆) e.g. בֵּן son, בְּנִי = בֵּן + יִ; בְּנֵי־, but with בְּנֵי = בֵּן + יֵ.

5. ē (◌̄) is shortened into ă (◌̆) in some cases e.g. בָּתֵּי (const. בָּתִּי); שָׁלֹם (construct שָׁלֹמֹה); Isa. 33:8 נִבְזָה in pause from נִבְזֶה of Isa. 19:6, וְנִבְזֶה.

6. ō (־) is shortened into ŏ (ֶ) e.g. שִׁבְעָה (construct שִׁבְעַת, with suffix שִׁבְעָתָם); בֹּקֶר drought (construct בְּקַר, with suffix בָּקְרָם.

7. ō (־) is shortened to ŭ (ְ) e.g. דָּם with suffix דָּמָיו, yet it is sometimes דַּם; יָם with suffix is יַמּוֹ.

X. Weakening.

The process of weakening belongs to the naturally long vowels. It has been shown that a naturally long vowel can not be volatilized yet it can be weakened e.g. יָשַׁב as found in I. Chron. 2:45 becomes in the plural יָשְׁבוּ of II Chron. 26:7; פִּלֵּט, Judges 14:14, is פְּלֵטָה in the plural of Psalms 19:11

Again, in the Niph'al of the ל"י verb, the 3 M. Sg. נִסְתַּר to withdraw oneself becomes in the 2 M. הִסָּתְרוּ.

There are some examples from the Syriac which help materially. Those given by Wright are ܡܘܢ mūn for ܡܢ mōn and ܠܘܬ for ܠܝܬ.

XI. Volatilization.

Under this division there is considered another change which is caused by the shifting of the tone.

The change of a long vowel to a short one has already been considered, but now comes a step which shortens still more the vowels affected.

There are three names given to this new vowel.

It is called Śĕwâ, half-vowel, and tone-short.

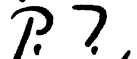
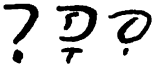
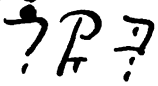
The ordinary sign used when a vowel is volatilized is ֵ, and is called Śĕwâ mobile or vocal, when that vowel is under a labial, dental, sibilant, lingual, or palatal.

There are some exceptions to this which will be considered later.

The process of volatilization affects

all of the tone-long, original short, and deflected vowels, but since those vowels, which have been heightened or deflected have come from an original short vowel it appears that the act of volatilization affects directly only the original short vowels ă, i, and ŭ.

Examples of the effect, directly or indirectly, are as follows:-

1. ă (=) from .
2. ā (∓) "  .
3. ĕ (=̣) " .
4. i (=̇) "
5. ī (=̈) "  .
6. ĭ (∓̣) " .
7. ŭ (=̇) "
8. ō (=̄) " .
9. ŏ (∓) and  .

In addition to the Šĕwâ mobile just considered there is another class called the compound Šĕwâ.

To the simple Šᵉwâ there is added a short vowel corresponding to the three original vowels.
This compound Šᵉwâ is used mostly with gutturals.
When the term guttural is used it is understood that ך is excluded although it generally has some of the qualities of gutturals.
There is found under the gutturals a Šᵉwâ which is marked ֽ, the same as the Šᵉwâ mobile, but this Šᵉwâ is called quiescens, silent, or syllable-divider and is distinguished by Dr. Harper as follows:-
"1. Under all consonants standing in the middle of a word without a vowel or half-vowel.
2. Under a final letter, when that letter a. Is Kăph; or b. Is a consonant containing Dāghēš-forte, or preceeded by another

consonant with Śĕvâ."
When an a-class vowel is volatilized under a guttural it becomes (–ַ) Ḥāṭĕph-Păthăh and is transliterated ă.
The original stem of the Dal is דָּבַר = דָּבָר so when the F. ה is added the ultimate vowel is volatilized so that from דָּבָר one gets הַדָּבְרָה.
When an i-class vowel is volatilized under a guttural it becomes (–ִ) Ḥāṭĕph-Śĕghôl which is transliterated ĕ,
The best example of this is in the word הֱיוֹת. The ִ here comes from an original i as is to be found in the Arabic where the word for God is אִלָהּ, with the article אַלְלָה.
When a u-class vowel is volatilized under a guttural one gets a Ḥāṭĕph-Qāmĕṣ (–ֳ) which

is transliterated e.
This is exemplified in בְּרֵאשִׁית = בְּרֵאשִׁית and יְדֵי = יְדֵי.
Besides the Sĕwâ mobile under consonants, which under gutturals without an exception becomes compound Sĕwâ, there is another compound Sĕwâ which takes the place of a quiescent Sĕwâ.
In reference to the choice between the three compound Sĕwâs which the gutturals take, it may be said that א, ה, and ר prefer, at the beginning of a syllable, the Ḥāṭēph-Pāṯāḥ, but אwsו had a preference for the Ḥāṭēph-Sĕgōl.
An exception to this is found in the words הָרָה and הָרָה where the preference is for ָ instead of ֶ i.e. הָרָה, הָרָה, and הָרָה.
When the tone syllable is moved

forward the ◌ִ under ס becomes ◌ֵ as in סֵפֶר, but סֶפֶר when the tone is lost because of the Măqqēph.
Also the combination ◌ִ י sometimes entirely changes into ◌ֵ ◌ִ when there is a removal of the tone e.g. הַיְלָדִים with ־ connective becomes הַיְלָדִי־ם.
According to Gesenius only ◌ֵ and ◌ֶ are found under consonants other than gutturals.
Green cites one example where a ◌ִ appears (מִלְּחָמוֹת in the edition of Stephanus), but it is not found in the best texts, hence it must be a scribal error for a simple Šĕwâ (◌ְ).
The several different cases where ◌ֵ sometimes is found under letters which are not gutturals, as collated from the different authorities, are as follows:-

1. Under a letter which is doubled e.g. מְנֹרַת branches Zechariah 4:12. This doubling causes a more distinct pronunciation of the Šᵉwâ.
2. Under a letter which should be doubled i.e. וַיִּתֵּן Gen. 27:38, and - וַיִּתֵּן פָּתַח Gen. 2:23. Perhaps used in such cases to call attention to, or make up for, an omitted doubling.
3. Under a letter followed by the same letter e.g. שִׁבְתֹתֵי Num. 10:36, Here used to show a distinct separation of the two letters.
4. Under initial sibilants which are preceded by a ו copulative e.g. וְשִׁבְעָה Lev. 25:34, וְשִׁבְעִים Dan. 9:18, and וְזִכְרוֹ Gen. 2:12.
His purpose here is to emphasize the vocal character of the Šᵉwâ.
5. Under ד, פ, ו, ת, כ, and ב respectively in Jer. 22:28, Ps. 55:22,

Ps. 28:9, Ez. 26:21, Esther 2:8 and Ps. 12:7

Same reason for its use as indicated under division four.

6. Anomalous forms as Gen 3:17 מִן־הָעֵץ and Gen. 21:6 צָחֳק לִי.

The Ḥāṭēph-Dāmĕṣ is used more freely with other than gutturals than is Ḥāṭēph-Pāṯāḥ or Ḥāṭēph-Seghôl.

Its use is as follows:-

1. When a Ḥôlem has been dropped i.e. יִרְדְּפוּ from יִרְדֹּף Num. 23:25 and in Ruth 2:1 מֹדַעַ לְךָ.

Here an effort is made to retain the o-sound by means of חֲ(ֳ).

2. Cases due to the omission of Dāgēsh-Forte e.g. מִמְּךָ for מִמֶּךָּ Gen. 2:23.

3. Cases due to following guttural only e.g. מִשְׁתֵּה Esther 3:14.

4. Calls attention to vocal sound of the Sĕwâ e.g. מִן־הָאָרֶץ II Kg 12:1.

5. Cases due to preceeding o-sound i.e. בְּעֵינֶיךָ from בְּעֵינֵי, and בְּעֵינֶיהָ from בְּעֵינֵי Ruth 2:11.
6. A preceeding initial ב and a guttural following the Šᵉwâ causes it to become compound e.g. בְּרֶגֶל 1 Kgs. 13:7, בְּחֹרֶב Job 17:10.
It must be said that no uniform system can be fixed upon since the M.S.S differ in the use of the compound Šᵉwâ.

XII. Formation of New Vowels.

There are four vowels which arise as new vowels similar to the original short *i* and *a* plus the deflected ֱ and (ֳ)ֲ. These are ֵ, ֶ, ֱ, and ֲ.

1. ֵ (ă) ר בּ יִ ר = ר ר בּ יִ ם.
2. ֶ (ĭ) ל שׁ בּ ל = ל שׁ בּ ל.
3. ֱ (ĕ) פ ר ם ר = ר פ ר ם ם.
4. ֲ (ŏ) ר ב יִ ר = ר ר ב יִ ר

In 1, 3, and 4 the new vowels are formed by a compound Še-vâ, under a guttural, coming to stand before a consonant with simple Še-vâ (mobile). This rule is subject to exceptions.

The new vowel (ֶ) in 3 is a change of one Še-vâ to the light vowel ֶ because of the difficulty in pronouncing two vocal Še-vâs.

XIII. Modification.

In this division there is considered a step in which there are grounds for radically different opinions.

What is the origin of the ֱ (ĕ) which can not be said to be deflected directly from original i nor blunted from ŭ? It is found in such words as יִרְאֵי from יִרְאִי and מֹאזְנֵי from מֹאזְנַי, original מֹאזְנַיִם. There are three theories to be considered:-

1. That some words have two different vowels under different circumstances, provincialism perhaps i.e. מֹאזְנֵי and יִרְאִי (=), יְרֵאֵי and יִרְאֵי, מֹאזְנֵי and מֹאזְנַי.

2. That an original ַ (ă) may be attenuated to ִ (i) and then under certain conditions again

be deflected to ֳ (ĕ). The attenuated form of the original קְטַל is קְטָ֫לָה, but the deflected form is קָטַל; הָקְטִיל an original form, קִטֵּל corresponds to the attenuated form, while הִקְטִיל shows the deflection. Two changes from the original may be seen in קָטְלָה, — קָטַל and קָטַל.

3. That it may be a modification similar to attenuation wherein a = (ă) may be changed into ֳ as well as into ֲ, since ֳ may be used instead of any one of the original short vowels i.e. III. An ă heightened to ֳ, tone-long, in קָטָלָה from קָטַל.

(2). An ĭ deflected to ֳ in הִקְטִיל from קִטֵּל.

(3). An ŭ blunted into ֳ in כָּתַב from כָּתַב Arabic كَتَبَ. Because of this fact, that ֳ (ă)

comes from these different directions, it is most likely that ā = (ă) may be modified into ֲ just as a = (ă) may be attenuated into ֳ. In fact this seems to be the correct theory.

The following examples will illustrate this;- קָטְלָה from קָטַל; קָטְלָם from קָטַל; קָטְלוּ from קָטַל; קָטְלוּהָ from קָטַל; קָטְלוּם from קָטַל.

In support of this theory of the modification of Păthăh to Seghôl it seems that the so-called Seghôlate nouns, which are so-named because of the theory that the second vowel is Seghôl, should be called Păthăh nouns.

It appears that the so-called helping vowel under the second radical of the ă, ĭ, and ŭ-class is not Seghôl but Păthăh. This Păthăh has been modified into Seghôl, except when there

is a guttural, then the modification does not take place.
It seems to be too much of a complication of matters to say that a Seghôl was added to the ground-form, and then again, when the plural is formed, that a ֲ (ă) was inserted before the tone.
It seems likely that the helping vowel was Pathăh, and that, when plural affixes were added, it was heightened in an open syllable to ָ (ā).
This ָ heightened from a ֲ (ă) appears in the ă, ĭ, and ŭ-class of the so-called Segholatē before plural affixes and in the plural before light suffixes.
In the other cases the helping vowel ֲ is lost and the original ֲ is restored.
It seems that the original form

of יָלַדְתָּ was יָלַדְתַּ, then a helping vowel = (ă) was inserted under the ד and the form became יָלַדְתָּ. The ultimate = (ă) was then modified into = (ĕ) while the penultimate = (ă) was heightened to tone-long Seghôl (ê). As an illustration the three classes of Segholates are here given as follows:-

1. סֵפֶר = סֵפֶר, סֵפֶר, סֵפֶר and סֵפֶר.
2. נֵבֶל = נֵבֶל, נֵבֶל, נֵבֶל and נֵבֶל.
3. שֵׁמֶן = שֵׁמֶן, שֵׁמֶן, שֵׁמֶן and שֵׁמֶן.

4. When one of the consonants is a guttural the form then appears as שֵׂעָר = שֵׂעָר, שֵׂעָר, שֵׂעָר and שֵׂעָר.

If it is true that a helping vowel can thus be heightened it goes to help prove that such vowels are subject to the same general modifications as others, therefore it adds strength to the theory that אָתָּה is a contraction of the helping

vowel ă (=), which has been attenuated to ĕ (=), with the original = and thus forming ֶ after the ֗ has been dropped because of its weakness.
Gesenius says: "But there are various reasons for believing that originally a toneless ă was heard after the second radical. The corresponding qătt-forms in Assyrian, with the case-endings, are kalbu, šamšu and abnu, but without the case-endings, kalab, šamaš, and aban.
In Delitzsch's opinion the vowel is ֲ sounded only after the second radical in order to avoid the double consonant at the end. The plurals of the Hebrew Segholates however point rather to the ground-forms málak, sifhar, and qúdaš." See Gesenius page 238 § 84.

XIV Anomalous Lengthening.

The original form of the Hiph'il was יַקְטִיל, the fourth form of the Arabic أَقْتَلَ corresponding to it.

The penultimate vowel = (ă) is attenuated to ֵ (i), while the ultimate = (ă) has been attenuated to ִ (i) it should in turn be heightened to ֵ (ē), just as it is in the Jussive יַקְטֵל, but there appears instead a naturally long î (ִי), which Dr. Harper calls anomalously lengthened. Gesenius says "This î (ִי) may have been transferred originally from the Imperfects of verbs פ״י as a convenient means of distinction between the Indicative and Jussive, to the Imperfect of the strong verb and afterwards to the whole of the Hiph'il." Slade says the same.

This ו"י Hiph'il Imperfect
form is יַפִּיל and it
seems that the statement
of Gesenius is correct, else
the Jussive and Imperfect
would have the same form.

XV. Prosthetic Vowels.

The regular Hebrew nouns have only three radicals, but there have arisen a few nouns with the three original radicals plus an additional one, א, ה, or י, which is added by means of a new vowel. These vowels are usually ֵ, ֶ, and ֱ.

A good example is found in Job 31,32 in the form אֵהָלַי from אֹהֶל to which an א with the prosthetic vowel ֵ has been added to pronounce it more easily; also אֵשְׁתּוֹן where the prosthetic vowel ֵ (ĕ) plus the א has been added to the original שְׁתּוֹן. These prosthetic vowels in Arabic are usually i (ـِ) and u (ـُ) accompanied with ا (Alif) e.g. اِبْن and اُمّ.

XVI. Păthăh - Furtive.

A short vowel = (ă) is sometimes inserted for facilitating the pronunciation of a word. Professor Ira M. Price says this vowel is found under a final guttural " when it is preceded by a heterogeneous long vowel, or any long vowel except ā ".

The final gutturals ח, ה, or ע receives this vowel, but א never receives a Păthăh-furtive because it is always quiescent. Reš never receives it unless it be the case in Psalms 7:6 (וְעִירָה־לִּי) which may be read yi'ărdōph or yĭrăddōph.

It hardly seems possible that the ă here can be called a Păthăh-furtive because this is a penultimate syllable while the general application requires it

to be final.
William Henry Green has the following to say in reference to such words as שָׂטָן and מִלְחָמָה: "But both the Sh'va under the final letter and the Daghesh-lene in it show that the guttural is not followed by a vowel. The sign beneath it must consequently be Păthăh-furtive and represents an antecedent vowel-sound."
The view held by Wright is, that the Păthăh here is an auxiliary one, hence it will be treated under the head of "auxiliary vowels".
When the guttural which has under it a Păthăh-furtive is no longer final the Păthăh vanishes, Examples of the Păthăh-furtive are as follows:- רוּחַ, רוּחִי, שָׂטָן, שָׂטָנִי and שָׂטָנְךָ.

XVII. Auxiliary Vowels.

When a word ends in ּי or ם and is followed by ל or ן there is inserted an auxiliary = (ă).

The sound is so slight that it does not effect the Dāgheš-lene. For in מִלְּךָ for מִלְכְּךָ the Dāgheš still remains in the ל.

This auxiliary = (ă) is best illustrated in the 2 F. Sg. of all the Perfects of the guttural verbs i.e. שָׁחַטְתְּ for שָׁחַטְתְּ and שָׁמַעְתְּ for שָׁמַעְתְּ.

In the various Segholate forms there is an insertion of a helping vowel =, ֶ, ִ or ֻ. The original מֶלְכְּ becomes מַלְכְּ through the helping vowel ַ if it be not the modification of a = as indicated elsewhere in this paper;

ʔɣ̈ʔ from ʔɣ̈ʔ with the helping vowel ̈; ʃʔ̈ʔ from ʃʔʔ through the helping vowel ̈ (ʔ̈) which is placed here because ʔ has a preference for this class i.e. the i-class; while ʔʔʃʔ becomes ʔʔ̈ʃʔ through the "insertion of the helping vowel in the bosom of the ʔ because of the preference for the ü-class vowel.

It is evident that the three original short vowels plus the deflected ̈, which comes from more sources and serves more purposes than any other, are auxiliary or helping vowels.

XVIII. Connecting Vowels.

The so-called vowels, =, ֵ, ֶ, ֱ, ֲ and ֳ, seem to be new vowels added in order to connect nouns and verbs with the pronominal suffixes, but on investigation they really appear to be only the modifications of what seems to be old case and verbal endings.

The following examples will show where the connecting vowels are found with verbs.—

1. =(ă) בָּרָא בְּרָאָם בְּרָאָן בְּרָאָהּ בְּרָאָן.
2. ֵ(ā) בָּרָא בְּרֵאשִׁית בְּרֵא.
3. ֶ(ĕ) יִבְרָא בְּרֶאשִׁית בְּרֶאן בְּרֶאהּ בְּרֶאן.
4. ֱ(ē) יִבְרָא בְּרֵאן בְּרֵאהּ בְּרֵאן?.
5. ֲ(ŏ) יִבְרָא בְּרֲאן בְּרֲאהּ בְּרֲאן?.
6. ֳ(ō) יִבְרָא בְּרֳאן בְּרֳאהּ בְּרֳא.

These vowels are also used to connect the nouns with pronominal suffixes.

XIX. Original Short Vowels.

As has been shown before there are three original short vowels i.e. ă, ĭ, and ŭ. The Arabic has these same three short vowels i.e. ـَ (ă), ـِ (ĭ), and ـُ (ŭ), but they are not subject to so many changes as the Hebrew. The only step worthy of mention is the full writing i.e. اَ, اِ, and اُ.

From the above nineteen changes it may be shown that all of these different vowels and modifications come from three original short vowels as will be seen in the following diagrams:-

(א) –

– = אל תפ

– = מן הרים הגבעות

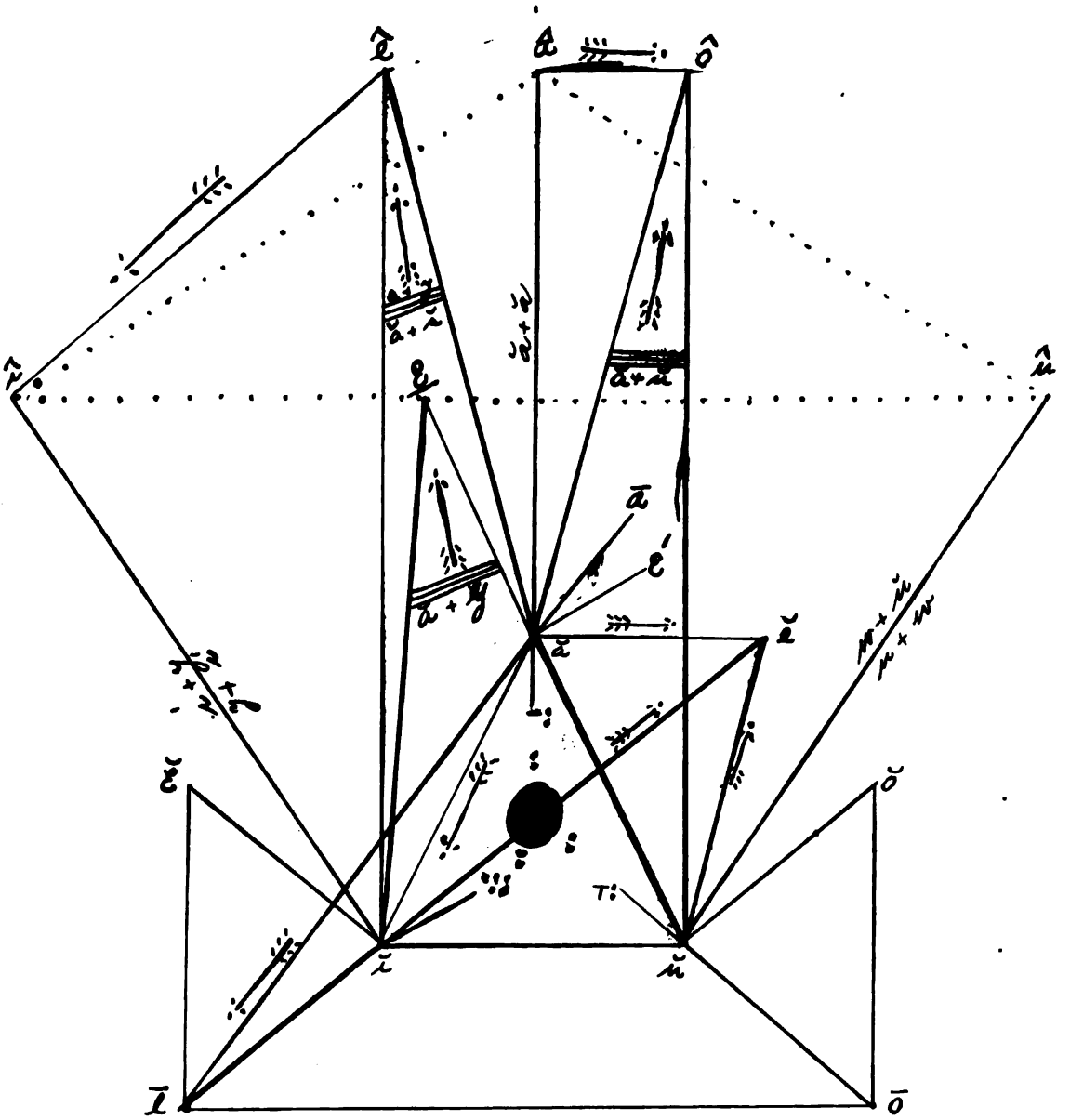
– = מן הגבעות

– = מן הבקעה

– = מן הנגב

– = מן שפלת

– = מן המדבר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